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PATENT APPLICATION

ATTORNEY DOCKET NO. 10992043-1

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): D. Amnon Silverstein

Confirmation No.: 9186

Application No.: 09/843,755

Examiner: Mylinh T. Tran

Filing Date: April 30, 2001

Group Art Unit: 2179

Title: METHOD AND APPARATUS FOR VIRTUAL OVERSIZED DISPLAY USING SMALL PANEL DISPLAY AS A MOVABLE USER INTERFACE

Mail Stop Appeal Brief-Patents  
Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**TRANSMITTAL OF APPEAL BRIEF**

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on September 8, 2006.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☐ 1st Month  
\$120

☐ 2nd Month  
\$450

☐ 3rd Month  
\$1020

☐ 4th Month  
\$1590

☐ The extension fee has already been filed in this application.

☐ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of \$ 500 . At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

☐ A duplicate copy of this transmittal letter is enclosed.

Date: December 15, 2006

Respectfully submitted,

D. Amnon Silverstein

By

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I hereby certify that this document is being filed by personal delivery to the Customer Service Window Randolph Building, 401 Dulany Street Alexandria, VA 22314, of the United States Patent & Trademark Office on the date indicated above.

By: 48,360  
(Attorney Signature and Reg. No.)



Attorney's Docket No. 10992043-1

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	
D. Amnon Silverstein	)	Group Art Unit: 2174
Application No.: 09/843,755	)	Examiner:
Filed: April 30, 2001	)	Appeal No.:
For: METHOD AND APPARATUS	)	
FOR VIRTUAL OVERSIZED	)	
DIPLAY USING SMALL PANEL	)	
DISPLAY AS A MOVABLE USER	)	
INTERFACE	)	

**APPEAL BRIEF**

**Mail Stop APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This appeal is from the decision of the Primary Examiner dated June 8, 2006, finally rejecting claims 1-3 and 5-17, which are reproduced as the Claims Appendix of this brief.

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I. Real Party in Interest

The present application is assigned to Hewlett-Packard Development Company L.P.

II. Related Appeals and Interferences

There was an earlier Appeal Brief dated February 15, 2005. However, the prosecution was reopened thereafter by the Examiner's non-final Office Action dated December 13, 2005. Subsequently, a second Notice of Appeal was filed on September 8, 2006, along with a Request for Pre-Appeal Brief Conference. This Appeal Brief, along with a Petition for Extension of Time, is being timely filed in response to the Notice of Panel Decision from Pre-Appeal Brief Review dated October 17, 2006.

III. Status of Claims

Claims 1-17 were originally pending in the application. The Amendment of March 13, 2006 canceled claim 4. All of the remaining claims 1-3 and 5-17 stand finally rejected. Claims 1-3 and 5-17 are being appealed.

IV. Status of Amendments

No amendment was filed after final rejection.

V. Summary of Claimed Subject Matter

The present invention is generally directed to providing an improved user interface for enhancing the manner by which information is entered into a database and later accessed from the database, such as a method and movable display for displaying information related to a physical document. Exemplary embodiments include the use of an overlay, in the form of a flat digital display, which can be moved

exemplary movable display is adapted to permit a large image to be viewed using a relatively small, portable display that can be navigated about the larger image (abstract).

As described in Appellant's specification at paragraph [0014] on pages 3-4, Appellant's Figures 1A and 1B show an exemplary embodiment, wherein a "movable display", such as a movable display 100 is provided. The movable display 100 has a display screen 102, such as the display screen included in hand-held display apparatus such as the HP Jornada <sup>TM</sup> (paragraph [0013]). The movable display can be moved about a first surface 104, such as a table or other surface.

Appellant's specification describes an exemplary movable display which includes structural elements; namely, means for detecting movement of the movable display (paragraph [0017] on pages 4-5) relative to the first surface using, for example, a transducer 108 (e.g., page 4, line 4). The detected movement of the movable display 100 (e.g., page 5, lines 1-5) relative to the surface is correlated to a position on a digitally stored image, such as the stored image of Figure 1A, so that information associated with that position can be extracted and presented on the display screen 102 of the movable display 100 (paragraph [0018]).

The foregoing features and advantages are broadly encompassed by Appellant's independent claims 1, 10 and 16.

For example, Appellant's claim 1 is directed to a "movable display". Claim 1 recites means for detecting movement of the movable display (e.g., page 4, line 1) relative to the first surface; and means for correlating movement of the movable display (e.g., page 5, lines 1 and 2) to information representing a portion of a first image stored in a database (paragraph [0018]), and for presenting information on the movable display (paragraph [0019]), wherein the detecting means is configured to detect orientation of the movable display.

An exemplary method for displaying information related to a physical document includes detecting movement of a movable display relative to a first surface (e.g., page 4, lines 1 and 2), correlating movement of the movable display to information representing a portion of a first image stored in a database, and presenting the information on the movable display (paragraph [0015]), wherein the

detecting includes detecting orientation of the movable display, as encompassed by claim 10 and exemplified in Appellant's Figure 2. Such a combination of features is neither taught nor suggested by the Tanaka et al. patent, considered alone or in combination with the Cobbley or Singh patents relied upon by the Examiner.

Appellant's claim 16 is directed to a movable display (e.g., Figs. 1A and 1B). Claim 16 recites means for detecting movement of the movable display relative to a first surface (e.g., paragraph [0017]); and means for correlating movement of the movable display to information representing a portion of a first image stored in a database, and for presenting the information on the movable display (e.g., paragraph [0018]), wherein the first image is an image of a keyboard that can be operated using the moveable display.

#### VI. Grounds of Rejection to be Reviewed on Appeal

The final Office Action presents the following issues for a review on this appeal:

- A. Whether claims 1-3 and 5-15 are anticipated by U.S. Patent No. 5,714,972 (Tanaka et al.);
- B. Whether claim 16 is unpatentable over the Tanaka et al. patent in view of U.S. Patent No. 6,501,464 (Cobbley et al.);
- C. Whether claim 17 is unpatentable over the Tanaka et al. patent in view of U.S. Patent No. 6,359,615 (Singh);

#### VII. Argument

Claims 1, 10 and 16 are the sole independent claims pending. Independent claims 1, 10 and 16 recite features neither taught nor suggested by any of the references relied upon by the Examiner.

The rejections raised in the Final Office Action are clearly improper and without basis,

## OVERVIEW

1. The Examiner has improperly rejected Applicant's independent claims 1 and 10 as being anticipated by a U.S. Patent to Tanaka which clearly does not disclose a detecting means configured to detect "orientation" of a movable display; and
2. The Examiner has improperly rejected independent claim 16 as being unpatentable over a combination of U.S. Patents to Tanaka and Cobbley which, even when considered in combination, fail to teach or suggest "correlating movement of a moveable display to information representing a portion of a first image stored in a database, ... wherein the first image is an image of a keyboard that can be operated using the movable display."

## ARGUMENT

In the Office Action dated June 8, 2006, claims 1-3 and 5-15 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,714,972 (Tanaka). Claim 16 is rejected as being unpatentable over the Tanaka patent in combination with U.S. Patent No. 6,501,464 (Cobbley et al.). Claim 17 is rejected as being unpatentable over the Tanaka patent in combination with U.S. Patent No. 6,359,615 (Singh). These rejections are respectfully traversed, as the documents relied upon by the Examiner, considered either individually or in the various combinations set forth in the Office Action, fail to teach or suggest Applicant's invention as set forth in independent claims 1, 10 and 16.

Independent claim 1 is directed to a movable display which includes, among other features, means for correlating movement of the movable display to information representing a portion of a first image stored in a database, wherein the detecting means is configured to detect **orientation** of the movable display.

The Tanaka patent is directed to a display apparatus and display method, wherein the **position**, not the orientation, of the display is detected. The Examiner relies on a description at column 3, lines 53-55 that a disclosed position detector

detects position of a Figure 13 display screen 4 in the horizontal and vertical directions shown in Figure 13. According to the Examiner, these vertical and horizontal directions constitute "four orientations of the display screen" (Final Office Action at page 3, lines 12-13). On page 6 of the Final Office Action, lines 1-2, the Examiner improperly states:

"The position detector detects the **position** in the horizontal and vertical directions" means "detecting **orientation**" (quote in original) (Emphasis added)

The Examiner's attempt to correlate a "position" to an "orientation" is without foundation. The ability to detect "orientation" encompasses an ability to detect rotation of the display, a feature which is not disclosed by the Tanaka patent.

As described at column 3, lines 53-55 of the Tanaka patent, a position detector 1 (Figure 3) is included within the disclosed device and is provided for detecting position in horizontal and vertical directions. However, detection of movement in the horizontal and vertical directions does not constitute detection of the orientation of the display. Column 3, lines 65 to column 4, line 3 of the Tanaka patent describe that a selector 3, based on a **position** of the display screen 4 (with no mention of any orientation), selects image information. The Tanaka patent clearly does not teach detecting orientation of a movable display. As such, the Examiner's rejection of claims 1 and 10 as being anticipated by the Tanaka patent is clearly improper and without basis.

The ability of Applicant's moveable display to detect orientation of the display provides significant advantages, such as an ability to reorient an image on the movable display to best present information from the database. For example, Applicant's specification paragraph [0019] on pages 5-6 describes tracking enough positional coordinates so that changes in orientation of the display can be determined. Such a feature can be used to ensure that portions of an image will be oriented on the movable display in a manner desired by a user. For example, when a user reorients a rectangular display to provide a larger viewing area along a given direction (e.g., where an image is tall and thin, and best viewed by rotating the



display 90°), the image will appear properly oriented within the display. Such a feature is neither taught nor suggested by the Tanaka patent.

Independent claim 1 is therefore allowable. Independent claim 10 recites a similar feature and is also allowable.

Independent claim 16 recites a movable display which includes, among other features, means for correlating movement of the movable display to information representing a portion of a first image stored in a database, wherein the first image is an image of a keyboard that can be operated using the movable display. Such a feature encompasses, for example, the disclosure in the sentence bridging pages 6-7 of Applicant's specification paragraph [0022]. This sentence is directed to an ability to correlate movement of a movable display so that upon movement of the display, a desired software key of a keyboard will be displayed. Such a feature is simply not taught or suggested by the Tanaka and Cobbley patents when considered alone or in combination with one another.

The Examiner asserts on page 7 of the Final Office Action (lines 7-8) that "While Tanaka fails to teach a keyboard image, [the] Cobbley patent shows an image of [a] keyboard of figure 1." Figure 1 of the Cobbley patent does disclose a display 500 with a transparent keyboard interface 508. However, there is no teaching or suggestion in the art for correlating movement of the display 500 to information representing a portion of a first image, where the first image is the image of keyboard interface 508.

In addition, there would have been no motivation or suggestion to have combined features of the Tanaka patent with features of the Cobbley patent in the manner suggested by the Examiner to arrive at Applicant's claim 16 combination. The Cobbley patent is directed to a graphical user interface in the form of a transparent keyboard overlaid on an information display. This patent is not directed to displaying information related to a physical document, in which information representing a portion of a first image is presented on a movable display. As such, there would have been no motivation or suggestion to have combined features of the Cobbley patent with those of the Tanaka patent.

At best, any such combination would have resulted in using software buttons as disclosed by Cobbley or the display screen of Tanaka. The Singh patent does not overcome the deficiencies of the Tanaka and Cobbley patents. As such, Claim 16 is allowable.

On page 2 of the Final Office Action, the Information Disclosure Statement filed May 23, 2006 is deemed to be proper. Reconsideration is requested.

**CONCLUSION**

In light of the foregoing, independent claims 1, 10 and 16 are allowable. All of the remaining claims depend from these claims and recite additional advantageous features which distinguish over the documents relied upon by the Examiner.

VIII. Claims Appendix

See attached Claims Appendix for a copy of the claims involved in the appeal.

IX. Conclusion

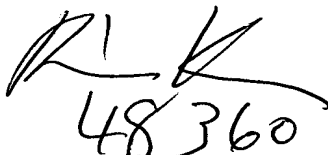
For the reasons discussed above, appellants respectfully submit that the Examiner's decision finally rejection claims 1-3 and 5-17 should be reversed.

Respectfully submitted,

Burns, Doane, Swecker & Mathis, L.L.P.

Date December 15, 2006

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## CLAIMS APPENDIX

### The Appealed Claims

1. A movable display comprising:  
  
means for detecting movement of the movable display relative to a first surface; and  
  
means for correlating movement of the movable display to information representing a portion of a first image stored in a database, and for presenting the information on the movable display, wherein the detecting means is configured to detect orientation of the movable display.
2. Movable display according to claim 1, wherein the detecting means is a transducer included within the movable display.
3. Movable display according to claim 2, wherein the transducer is used to correlate movement of the movable display to a change in position on a stored image.
5. Movable display according to claim 1, wherein the correlating means includes:  
  
a processor and associated memory.
6. Movable display according to claim 5, wherein the database is stored in a memory on board the movable display.

7. Movable display according to claim 5, wherein the information is stored in a database remote from the movable display.

8. Movable display according to claim 7, wherein the information stored remote to the movable display is accessed via a wired link.

9. Movable display according to claim 7, wherein the information stored remote to the movable display is accessed via a wireless link.

10. Method for displaying information related to a physical document, comprising:

detecting movement of a movable display relative to a first surface;

correlating movement of the movable display to information representing a portion of a first image stored in a database; and

presenting the information on the movable display, wherein the detecting includes detecting orientation of the movable display.

11. The method according to claim 10, wherein a transducer is used to detect changes in orientation of the movable display.

12. The method according to claim 10, wherein the database is stored in a memory on board the movable display.

13. The method according to claim 10, wherein the information is stored in a database remote from the movable display.

14. The method according to claim 10, wherein the information is stored remote to the movable display and accessed via a wired link.

15. The method according to claim 10, wherein the information is stored remote to the movable display and accessed via a wireless link.

16. A movable display comprising:

means for detecting movement of the movable display relative to a first surface; and

means for correlating movement of the movable display to information representing a portion of a first image stored in a database, and for presenting the information on the movable display, wherein the first image is an image of a keyboard that can be operated using the moveable display.

17. The method according to claim 10, wherein a first portion of the first image is displayed at a first resolution and a second portion of the first image is displayed with a reduced resolution relative to the first resolution.

**EVIDENCE APPENDIX**

None.

**RELATED PROCEEDINGS APPENDIX**

None